

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) A paging control method of a communication system that selectively provides to a terminal one of a plurality of communication services implemented by integrating a plurality of communication systems using an intermediary gateway, the paging control method comprising:

a first step of the gateway requesting that each of the plurality of communication systems transmit a paging signal to the terminal when the gateway is to transmit a downlink signal to the terminal;

a second ~~[[first]]~~ step of each of said plurality of communication systems transmitting the ~~[[a]]~~ paging signal ~~from each of the plurality of communication systems~~ to ~~[[a]]~~ the terminal as requested in the first step; and

a third ~~[[second]]~~ step of said terminal receiving the plurality of paging signals ~~by said terminal~~, and of selecting a desired communication system for use in receiving the downlink signal, said desired communication system being selected by said terminal from said plurality of communication systems in accordance with information contained in the plurality of received paging signals ~~signal received~~.

Claim 2. (Currently Amended) The paging control method as claimed in claim 1, further comprising a fourth ~~[[third]]~~ step of transmitting a connection request signal from said terminal to said desired communication system selected at the third ~~[[second]]~~ step.

Claim 3. (Currently Amended) A paging control method of a communication system that selectively provides to a terminal one of a plurality of communication services implemented by integrating a plurality of communication systems using an intermediary gateway, and that includes a paging agent for managing paging signals, the paging control method comprising:

a first step of the terminal previously transmitting a selection criteria ~~previously a request~~ for a communication system the ~~[[a]]~~ terminal wishes to use to receive downlink signals, and of transmitting terminal location information ~~of the terminal from the terminal~~ to the paging agent;

a second step the paging agent ~~, and of~~ registering the received selection criteria ~~[[request]]~~ and the terminal location information ~~in the paging agent~~, characterized in that the selection criteria includes one or more of a communication cost, a transmission rate, and a transmission quantity; and

a ~~[[second]]~~ third step of said paging agent selecting a ~~an optimum~~ communication system from among the plurality of communication systems ~~by said paging agent~~ in accordance with the registered selection criteria ~~[[request]]~~ and the registered terminal location information, the selected communication system to be used to transmit a downlink signal to the terminal in ~~said paging agent; and~~

~~a third step of transmitting the paging signal from said optimum communication system to said terminal.~~

Claim 4. (Currently Amended) The paging control method as claimed in claim 3, further comprising a fourth step of transmitting the paging signal from said selected communication system to said terminal

~~fourth step of transmitting a connection request signal from said terminal to said optimum communication system.~~

Claim 5. (Currently Amended) The paging control method as claimed in Claim 3, further comprising:

~~A paging control method of a communication system that selectively provides one of communication services implemented by integrating a plurality of communication systems, and includes a paging agent for managing paging signals, said paging control method comprising:~~

~~a first step of transmitting previously a request for a communication system a terminal wishes to use, and terminal location information of the terminal from the terminal to the paging agent, and of registering the received request and the terminal location information in the paging agent;~~

~~a second step of selecting an optimum communication system from among the plurality of communication systems by said paging agent in accordance with the registered terminal location information in said paging agent; and~~

a ~~[[third]]~~ fourth step of a predetermined communication system transmitting a paging signal including a name of said communication system selected at the ~~[[second]]~~ third step ~~from a given communication system predetermined from among said plurality of communication systems~~ to carry out transmission of the downlink signal to said terminal, the predetermined

communication system being different than the communication system selected to carry out transmission of the downlink signal to said terminal.

Claim 6. (Currently Amended) The paging control method as claimed in claim 5, further comprising a fifth ~~[[fourth]]~~ step of transmitting a connection request signal from said terminal to said predetermined ~~[[given]]~~ communication system, and ~~[[of]]~~ waiting for the downlink ~~an information~~ signal from said selected ~~[[optimum]]~~ communication system identified ~~[[contained]]~~ in said paging signal.

Claim 7. (Currently Amended) The paging control method as claimed in Claim 4, further comprising a fourth step of transmitting a connection request signal from said terminal to said selected communication system ~~anyone of claims 1, 3 and 5, wherein the second step uses one of a communication cost, a transmission rate, a transmission quality and a combination of at least two of them as a selection index of said optimum communication system.~~

Claim 8. (Currently Amended) A paging control system of a communication system that selectively provides to a terminal one of a plurality of communication services implemented by integrating a plurality of communication systems using an intermediary gateway, the paging control system comprising:

communication control means for requesting that each of the plurality of communication systems transmit a paging signal to the terminal when the gateway is to transmit a downlink signal to the terminal ~~causing each of the plurality of communication systems to transmit a paging signal via an external network~~; and

a terminal for receiving the plurality of paging signals transmitted by said plurality of communication systems, and for selecting a desired communication system for use in receiving the downlink signal, said desired communication system being selected from said plurality of communication systems in accordance with information contained in the plurality of received paging signals ~~signal received~~.

Claim 9. (Currently Amended) The paging control system as claimed in claim 8, wherein said terminal is adapted to transmit ~~transmits~~ a connection request signal to said desired communication system ~~selected~~.

Claim 10. (Currently Amended) A paging control system of a communication system that selectively provides to a terminal one of a plurality of communication services implemented by integrating a plurality of communication systems using an intermediary gateway, and that includes a paging agent for managing paging signals, the paging control system comprising:

a terminal for ~~previously~~ transmitting a selection criteria ~~previously a request~~ for a communication system the [[a]] terminal wishes to use to receive downlink signals, and for transmitting terminal location information of the terminal from the terminal to the paging agent, characterized in that the selection criteria includes one or more of a communication cost, a transmission rate, and a transmission quality;

registering means for registering the received selection criteria ~~request~~ and the terminal location information in said paging agent; and

selecting means in said paging agent for selecting a an optimum communication system from among said plurality of communication systems in accordance with the registered selection criteria [[request]] and the registered terminal location information, the selected communication system to be used to transmit a downlink signal to the terminal in said registering means; and
~~communication control means for causing said optimum communication system selected by said selecting means to transmit the paging signal to said terminal.~~

Claim 11. (Currently Amended) The paging control system as claimed in claim 10, further comprising communication control means for causing said selected communication system selected by said selecting means to transmit the paging signal to said terminal wherein ~~said terminal transmits a connection request signal to said optimum communication system.~~

Claim 12. (Currently Amended) The paging control system as claimed in Claim 10,
further comprising: ~~A paging control system of a communication system that selectively provides one of communication services implemented by integrating a plurality of communication systems, and includes a paging agent for managing paging signals, the paging control system comprising:~~

~~a terminal for transmitting previously request for a communication system a terminal wishes to use, and terminal location information of the terminal to the paging agent;~~

~~storing means in said paging agent for registering the received request and the terminal location information;~~

~~selecting means in said paging agent for selecting an optimum communication system from among the plurality of communication systems in accordance with the registered request and the terminal location information in said storing means; and~~

communication control means for a predetermined communication system to transmit ~~transmitting~~ a paging signal including a name of said selected ~~[[optimum]]~~ communication system selected by said selecting means, the predetermined communication system being different than the selected communication system from a given communication system predetermined from among said plurality of communication systems to said terminal.

Claim 13. (Currently Amended) The paging control system as claimed in claim 12, wherein said terminal is adapted to transmit ~~transmits~~ a connection request signal to said predetermined ~~[[given]]~~ communication system, and waits for the download ~~[[an information]]~~ signal from said selected ~~[[optimum]]~~ communication system identified ~~[[contained]]~~ in said paging signal.

Claim 14. (Currently Amended) The paging control system as claimed in Claim 11 ~~anyone of claims 8, 10 and 12~~, wherein said terminal is adapted to transmit a connection request signal to said selected communication system ~~said selecting means uses one of a communication cost, a transmission rate, a transmission quality and a combination of at least two of them as a selection index of said optimum communication system.~~

Claim 15. (Currently Amended) The paging control system as claimed in Claim 10 ~~anyone of claims 8, 10 and 12~~, wherein said selecting means is adapted to carry ~~[[carries]]~~ out

the selection of said selected ~~optimum~~ communication system in response to a query ~~about the optimum communication system~~ from said communication control means about what communication system is to be used to transmit the downlink signal to the terminal.

Claim 16. (Currently Amended) A recording medium containing a program code, said program code comprising program code means adapted to perform all the steps of the method of any of Claims 1 to 7 ~~which records a paging control program in a communication system that selectively provides one of communication services implemented by integrating a plurality of communication systems, and includes a paging agent for managing paging signals, said paging control program, which is used by a computer for controlling said paging agent, causing said computer to:~~

~~receive from a terminal a request for a communication system said terminal wishes to use, and terminal location information of said terminal;~~

~~to register the received request and the terminal location information;~~

~~to select an optimum communication system from among the plurality of communication systems in accordance with the registered request and the terminal location information; and~~

~~to cause said optimum communication system selected to transmit the paging signal to said terminal.~~

Claim 17. (Cancelled).